

IN THE CLAIMS

1. (currently amended) An apparatus adapted for connection to a host system and for receiving electric power from the host system, the apparatus comprising:

a plurality of function blocks, each function block performing a specified function when selected by the host system; and

a circuit operable to control each said function block selected by the host system to consume power at an operating rate and to control each said function block not selected by the host system to consume at least some power at a standby rate less than said operating rate; and

a function register coupled between each of said plurality of function blocks and said circuit, said function register including an address structure that is configurable based on the specified function selected by the host system.

2. (currently amended) The apparatus according to claim 1, further comprising:

a function code identifying each of said plurality of function blocks; ~~and~~

~~a function register common to said plurality of function blocks~~ wherein, said function register ~~storing~~ stores said function code for each said function block selected by the host system, and ~~wherein~~ said circuit is operable to control each said function block whose function code is stored in said function register to consume power at said operating rate and to control each said function block whose function code is not stored in said function register to consume power at said standby rate.

3. (currently amended) An apparatus adapted for connection to a host system and for receiving electric power from the host system, the apparatus comprising:

a plurality of function blocks, each function block performing a specified function when selected by the host system;

a function code identifying each of said plurality of function blocks;

a circuit operable to control each of said plurality of function blocks selected by the host system to consume power at an operating rate and to control each of said plurality of function blocks not selected by the host system to consume at least some power at a standby rate less than said operating rate; and

a register common to said plurality of function blocks, said register including a write area and a read area distinct from said write area, said register storing said function code for each said function block selected by the host system in said write area and a power save value indicating that a power save mode has been selected by the host system in said read area;

said circuit being operable to control each said function block whose function code is not stored in said register to consume power at said standby rate when said power save value is stored in said register.

4. (currently amended) A data processing system, comprising:

an apparatus for performing at least one function; and
a host system for supplying electric power to said apparatus;

said apparatus including:

a plurality of function blocks, each function block performing a specified function when selected by said host system;

a function code identifying each of said plurality of function blocks;

a function register common to said plurality of function blocks, said function register including a write area and a read area distinct from said write area, said function register—and storing said function code for each said function block selected by said host system in said write area; and

a circuit operable to control each said function block whose function code is stored in said function—registerwrite area to consume power at an operating rate and to control each said function block whose function code is not stored in said function—registerwrite area to consume power at a standby rate greater than zero and less than said operating rate; and

said host system including a writing unit operable to write said function code for each said function block selected by said host system into said function—registerwrite area.

5. (currently amended) A data processing system, comprising:

an apparatus for performing at least one function; and
a host system for supplying electric power to said apparatus;

said apparatus including:

a plurality of function blocks, each function block performing a specified function when selected by said host system;

a function code identifying each of said plurality of function blocks;

a register common to said plurality of function blocks, said register storing said function code for each said

function block selected by said host system and a power save value indicating that a power save mode has been selected by said host system, said register including an address structure that is configurable based on the function selected by said host system; and

a circuit operable to control each said function block whose function code is stored in said register to consume power at an operating rate and to control each said function block whose function code is not stored in said register to consume power at a non-zero rate less than said operating rate when said power save value is stored in said register.

6. (original) The data processing system according to claim 5, wherein said host system includes a writing unit operable to write said function code for each said function block selected by said host system and said power save value into said register.

7. (currently amended) In a data processing system including a host system and an apparatus for performing functions, the apparatus including a plurality of function blocks and a register common to the plurality of function blocks and having a write area and a read area distinct from the write area, each function block being identified by a function code and performing a specified function when selected by the host system, a method of controlling power consumption of the apparatus, comprising:

supplying electric power from the host system to each of the plurality of function blocks at a standby rate of consumption;

operating the host system to select a function block from among the plurality of function blocks;

controlling the host system to send the function code of the selected function block to the apparatus;

controlling the apparatus to ~~set~~write the function code of the selected function block to the write area of the register; and

reading the function code of the selected function block from the read area of the register and controlling power consumption of the plurality of function blocks so that the selected function block consumes power at an operating rate of consumption greater than said standby rate of consumption and each said function block whose function code is not stored in the register consumes power at said standby rate of consumption.

8. (currently amended) In a data processing system including a host system and an apparatus for performing functions, the apparatus including a plurality of function blocks, each function block performing a specified function when selected by the host system, a method of controlling power consumption of the apparatus, comprising:

supplying electric power from the host system to each of the plurality of function blocks at a standby rate of consumption;

operating the host system to select a function block from among the plurality of function blocks;

controlling the host system to send a notification to the apparatus identifying the selected function block;

storing the notification in a write register;

reading a value associated with the stored notification from a read register distinct from the write register; and

controlling power consumption of the plurality of function blocks based on the read value so that each function block not selected by the host system consumes power at the

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standby rate of consumption and the selected function block consumes power at an operating rate of consumption greater than the standby rate of consumption.